

ABSTRACT

The present invention relates to an improvised membrane-based device for speedier and effective concentrating of aqueous solution upto about 95%, as shown in figure nos. 1-4, a method of manufacturing an improved membrane-based device for speedier and effective concentrating of aqueous solution upto 95%, and also, an improved process of speedier and effective concentrating of the aqueous solution upto about 95% using the aforementioned membrane-based device, said process comprising steps of feeding the aqueous solution into the aqueous solution container, filtering the fed solution to remove suspended particles, passing the resultant filtered solution into a membrane module, segregating permeate and concentrate in the membrane module, and recycling the concentrate multiple times to obtain the highly concentrated final concentrate.

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